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CHRONICLE OF THE WORLD HEALTH ORGANIZATION

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SCHEDULE OF MEETINGS

29 September-4 October	**Expert Committee on Mental Health, third session, Geneva**
4-10 October	**Expert Committee on Bilharziasis, first session, Puerto Rico**
13-18 October	**FAO/WHO Joint Expert Panel on Brucellosis, second session, Florence**
20-25 October	**Expert Committee on Biological Standardization, sixth session, Geneva**
24-29 October	**Expert Committee on Public-Health Administration, second session Geneva**
27 October-1 November	**Expert Committee on the International Pharmacopoeia, eleventh session Geneva**
2-4 November	**Expert Committee on the International Pharmacopoeia, Subcommittee on Non-Proprietary Names, fifth session, Geneva**
10-15 November	**Expert Committee on Antibiotics, second session, Geneva**

INTERNATIONAL CERTIFICATES OF VACCINATION

Quarantine practice underwent a radical change towards the end of the 19th century : no longer was a whole ship, together with its complement of passengers and crew, subjected to quarantine isolation. A more rational view prevailed, and quarantine measures were applied to the infected individual rather than to his means of transport and to the other persons on board.

The advent and rapid expansion of air travel, after the first World War, created special problems. The speed with which a person could travel by air from an endemic or epidemic centre of a disease to an area previously protected, because of the fact that travel by sea took longer than the incubation periods of the major infectious diseases, so obviously increased the risk of spread of infection as to necessitate the drawing-up of a code of agreed international practice for aerial navigation in order adequately to deal with the new problem. The result was the International Sanitary Convention for Aerial Navigation of 1933.

In this Convention certain advantages, as regards restrictive measures, were granted to persons who could produce satisfactory evidence that they had been vaccinated against either cholera or smallpox or both, as the case might be. The proof of vaccination was to be a written certificate officially authenticated. These were the first two examples of international certificates of vaccination recommended to be in the possession of travellers on international journeys.

In 1944, the International Sanitary Convention of 1926, relating to sea traffic, and the International Sanitary Convention of 1933, applicable to aerial navigation, were revised. Annexed to the texts of these revised Conventions were model forms on which certificates, to be known as international certificates of inoculation and vaccination, could be written; and on these forms a space was provided for endorsement by means of an official stamp. The immunizing procedures for which such certificates were annexed were against the two diseases mentioned in previous Conventions—i.e., smallpox and cholera—and against two additional diseases —yellow fever and typhus. Persons in possession of such certificates were accorded certain privileges on arrival at their destination.

It has to be understood, however, that, in quarantine practice, vaccinations and inoculations are not primarily intended to protect the traveller ; their object is to prevent the importation of communicable disease into a territory. In this connexion it had been brought to the notice of the Interim Commission of WHO that, since the second World War, there had developed a widespread tendency on the part of national health-administrations to require from travellers certificates of immunization, irrespective of the value of sich immunizations for the protection of the countries reached

by the travellers or, indeed, for that of the travellers themselves. The Interim Commission was also aware of the many disadvantages inherent in the compulsory production of many immunization certificates and considered that the serious obstruction to free and rapid travel caused by such requirements was often out of proportion to the protection likely to be afforded to the country of arrival.

Therefore, when the Interim Commission began in 1946 its task of revising the International Sanitary Conventions and similar agreements, with a view to ensuring more effectively than had previously been possible the maximum security against the international spread of disease with the minimum interference with world traffic, it did not overlook the need for simplifying and for reducing to the lowest number compatible with essential requirements the certificates of immunization to be carried by a traveller on an international journey. That this need has now been met is evidenced in the International Sanitary Regulations [1] which, drawn up by WHO between 1948 and 1951 in continuance of the work of the Interim Commission, unanimously adopted in May 1951 by the Fourth World Health Assembly, and due to enter into force on 1 October 1952, provide, in this respect, for forms and models of international certificates of vaccination only against smallpox, cholera, and yellow fever. Moreover, in accordance with the terms of one of the Articles of these Regulations *no certificate of vaccination, other than for the three diseases just mentioned, shall be required in international traffic.*

In regard to certificates of immunization and to immunizations against quarantinable diseases, the following remarks may prove of interest :

Vaccination against smallpox is of established value but, although the possession of an *International Certificate of Vaccination or Revaccination against Smallpox* may be required of all travellers by a health administration, this requirement should, in normal circumstances, be limited to arrivals from smallpox-infected areas or suspects.

Anticholera vaccination has proved in practice to be of value in prophylaxis; and evidence of vaccination against the disease, as furnished by the *International Certificate of Vaccination or Revaccination against Cholera*, is taken into consideration in the application to travellers of the relevant measures permitted under the Regulations.

Complete reliance is placed on vaccination against yellow fever and, as a result, persons holding a valid *International Certificate of Vaccination or Revaccination against Yellow Fever* are exempt from all the quarantine measures to which they would otherwise be subjected on account of that disease.

WHO is of the opinion that vaccination against plague and typhus, though of value in the protection of the individual, has no place in inter-

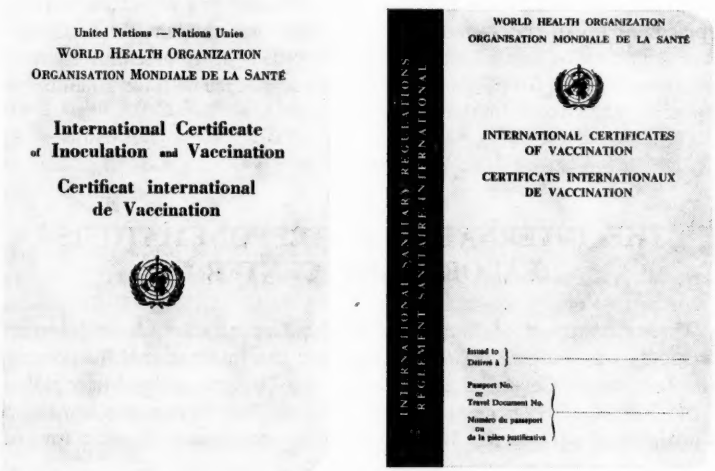
[1] *World Hlth Org. techn. Rep. Ser.* 1951, **41**. See also *Off. Rec. World Hlth Org.* 1952, **37** and *Chron. World Hlth Org.* 1951, **5**, 223.

national quarantine practice. The Organization feels that the use of insecticides with residual effect should be the chief form of international action against these diseases. Therefore, no reference to vaccination against plague and typhus or to certification thereof appears in the International Sanitary Regulations, except for the provision that vaccination against plague or typhus shall not be required as a condition of admission of any person to a territory.

In the light of the foregoing, it is anticipated that, after the lapse of a few months, during which the transition from the International Sanitary Conventions to the International Sanitary Regulations will take place, the demands made on individual travellers as regards possession of certificates of vaccination should be much less onerous and more reasonable than heretofore. It has to be observed, however, that the "old"—type certificates of vaccination or inoculation, issued under the International Sanitary Conventions, will, if issued prior to 1 October 1952—the date on which the International Sanitary Regulations come into force—continue to retain their validity during the periods indicated thereon. It is possible, therefore, that during the next few years two different certificates of vaccination against smallpox, cholera, or yellow fever will be in use—both types being equally valid.

The World Health Organization publishes the blank forms and models of the *International Certificates of Vaccination* in yellow-covered booklets.

FIG. 1. INTERNATIONAL VACCINATION CERTIFICATE BOOKLETS



Left, the former type of booklet ; right, the new form

Reproduced in fig. 1 are the front covers of the booklets containing, on the one hand, the old type of certificate issued under the Conventions and, on the other, the new type of certificate issued under the Regulations. Briefly, the differences between the old and the new types are as follows :

Certificate of vaccination against smallpox. It is now no longer necessary for the result of the vaccination to be recorded, except in the case of a primary vaccination. The certificate of a person revaccinated therefore becomes valid immediately.

Certificate of vaccination against yellow fever. The validity of this certificate has, under the Regulations, been extended to six years, as compared with four years under the Conventions.

Certificate of vaccination against cholera. This certificate, from the point of view of the ordinary international traveller, has remained unchanged.

It is important to note that the principle of authentication by a local health authority of the signature of the person performing the vaccination was not accepted in the Regulations, so that in the majority of instances a traveller will be furnished with a certificate on completion of the vaccinating procedure and will not be called upon to make a further journey in order to get it authenticated.

The vaccination and inoculation certificate requirements of some 160 countries and territories are published early in each year as a supplement to the *Weekly Epidemiological Record* of WHO. Any amendments or additions to the requirements are published in the *Record* as soon as the details are received by the Organization. To keep the information in the supplement up to date—and it is important that this should be done if inconveniences to travellers are to be avoided—it is essential to make alterations to the information given in it in accordance with the amendments appearing each week in the *Record.*

THE INTERNATIONAL TREPONEMATOSIS LABORATORY CENTER *

Through support of the World Health Organization, Johns Hopkins University was enabled in 1950 to establish the International Treponematosis Laboratory Center as a unit within the Department of Microbiology of the School of Hygiene and Public Health. This Center was envisioned as an integral part of the WHO worldwide programme directed towards

* This report was prepared by Dr. T. B. Turner, Professor of Bacteriology and Director of the International Treponematosis Laboratory Center, Johns Hopkins University, Baltimore, Md., USA.

the control of the treponemal diseases—syphilis, yaws, bejel, and pinta. Its principal function was to supplement the work of the field teams and regional laboratories and, in particular, to investigate problems which, while of a fundamental nature in respect to the control of these diseases, could not be adequately studied in the field.

During the two years of its existence, the work of the Center has been concentrated largely on the investigation of two problems : (1) a study of the biological characteristics of strains of treponemes isolated from patients with different clinical syndromes in various parts of the world, and (2) an investigation of the sensitivity to penicillin of strains of *Treponema pallidum*, *T. pertenue*, and bejel treponemes. In order to pursue these studies it was necessary to isolate suitable strains of treponemes from patients with classical symptoms of one or another of the treponematoses. In accomplishing this the personnel of the International Treponematosis Laboratory Center has had the full co-operation of WHO field teams, regional laboratories, and the professional and administrative staffs of the regional offices and of the Secretariat in Geneva.

Rabbits and hamsters were sent by air from the Center to the field teams, which selected typical cases of syphilis, yaws, or bejel and transferred infective material from them to the laboratory animals. The animals were then returned promptly by air to the Center, where they could be maintained under cool conditions which are known to enhance the pathogenicity of the infecting organisms.

Twelve strains of *Treponemata* have been successfully isolated : two from southeastern Europe, five from the Middle East, two from the southwestern Pacific area, two from the West Indies, and one from North America. Of these strains, two have been from typical cases of endemic syphilis, three from venereally acquired syphilis, four from yaws, and three from bejel. In addition, attempts have been made to isolate strains of pinta spirochaetes; but, while two strains of treponemes were demonstrated in hamsters for two passages each, the strains were not perpetuated beyond this point.

The comparative study of these strains of treponemes from various parts of the world has proved to be most interesting. As a broad generalization, it can be said that there is a close immunological relationship among all the strains, regardless of the clinical syndrome or the area of the world from which they are isolated. On the other hand, the disease picture induced in laboratory animals, while qualitatively similar, differs in certain respects depending upon the clinical syndrome from which the organisms were obtained.

As for the reaction of these strains of treponemes to penicillin, both in vivo and in vitro tests indicate that the susceptibility to this drug is of the same order of magnitude for all strains.

These results have important implications for treponematosis-control programmes, for they suggest that the basic biology of the different clinical syndromes is very similar and that, from a medical standpoint, what is learned about the control of one treponemal disease can probably be readily applied to another. On the other hand, there may still be important epidemiological or sociological features which require more individualistic approaches. Studies are now being directed to determining, if possible, the basis for the differences observed among the isolated strains, and to an attempt to modify the characteristics of a particular strain through changes in the experimental conditions.

REGIONAL COMMITTEE FOR AFRICA
Second Session

The Region for Africa

Of all the WHO Regions, Africa is probably the least well known. Unlike Asia, Africa has never been traversed by highways. Its rivers, intersected by rapids, have never served as a means of penetrating the interior. Distances are enormous, and the bush is often impassable. As a result, communities in the heart of Africa are isolated from each other; differ considerably in culture, ways of living, religion, and language (more than 700 languages are spoken in Africa); and do not have the same economic and health problems—nor the same attitude with regard to the same problems. Before preparing health programmes for the Region for Africa, WHO must become more familiar with the people who inhabit the continent. And, of the three divisions which will comprise the Regional Office for Africa—the medical, the sanitary engineering, and the medico-sociological—the last, dealing with medico-sociology, will be of considerable importance.

The diversity of the problems in nutrition, as an example, give some idea of the complexity of all the problems in Africa : malnutrition prevails in numerous territories, but WHO cannot prepare, with the collaboration of the governments, a general programme which would be valid for all the continent. While in Uganda the basic food is the banana, elsewhere it may be millet, or rice, or another grain; and, while many Africans do not eat enough meat, it may be, in one tribe, because livestock is too scarce; in another tribe, because meat is taboo; and in a third, simply because it is not the custom. In certain villages in which fowl are plentiful, no one would think of using eggs for food. Milk is not consumed at all in certain regions, and in others it is kept for the aged. There are tribes in which the women never eat vegetables, which are believed to make them less desirable to their husbands.

Second Session of the Regional Committee

The Regional Committee for Africa, which has the responsibility of considering all the health problems of Africa, met for the first time in September 1951 in Geneva;[1] it held its second session from 31 July to 7 August 1952 at Monrovia, Liberia—meeting for the first time on African soil. It was also the first time that an international conference had taken place in Liberia. Seven Member States of WHO were represented : Belgium, France, Liberia, Portugal, Spain, Union of South Africa, and the United Kingdom of Great Britain and Northern Ireland; the delegate of the Associate Member, Southern Rhodesia, was unable, at the last moment, to attend. Delegates of the five European Member States were accompanied by advisers from the various countries of Africa. The committee elected Dr. F. J. C. Cambournac (Portugal) as Chairman, Dr. S. L. A. Manuwa (United Kingdom) as Vice-Chairman, and Dr. M. Kivits (Belgium) as Rapporteur.

The Director of the Regional Office, Dr. F. Daubenton, described the activities of the Office during the period between the two sessions in a report which is hereunder summarized.

Report on Regional Activities

For the year 1952, the first step has been to become acquainted with African health problems by means of surveys. Two of the three public-health officers recommended for recruitment by the committee at its first session have already been at work for several months ; they have visited numerous countries and territories, studied the prevailing conditions, determined the role which WHO might usefully play, and suggested several projects to local authorities. For each of the major problems, WHO has sent a competent specialist to specific areas. The Organization has also drawn upon the experience of people who have worked for a long time on the continent and who alone can furnish exact and detailed information on present needs and social, economic, and cultural conditions of a certain locality.

For Africa as a whole, the most urgent problems are nutrition and environmental sanitation. Next in importance are malaria, tuberculosis, yaws, bilharziasis, onchocerciasis, trypanosomiasis, yellow fever, rabies, and leprosy. In planning control measures against any of these diseases, another problem of fundamental importance arises—lack of medical and auxiliary personnel.

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[1] See *Chron. World Hlth Org.* 1951, **5**, 311.

Nutrition

The representatives of the countries of Africa all recognize the importance in their territories of diseases caused by malnutrition.[2] But one cannot speak of *a* nutrition problem in Africa because, as pointed out above, it is a question of many problems of different origins, depending on the country and the tribe.

The Food and Agriculture Organization (FAO) and WHO sponsored at Marseilles (April to July 1952) a nutrition course for doctors of all nationalities who are working in Africa. In September 1952, nutrition and maternal and child health experts left for the Belgian Congo and French Equatorial Africa, where they are going to complete plans for a programme in which FAO and the United Nations International Children's Emergency Fund (UNICEF) will participate. Also, at the request of the Commission for Technical Co-operation in Africa South of the Sahara (CTCA), WHO is collaborating in preparations for CTCA/FAO/WHO conference on nutrition, which will take place in November at Fajara, Gambia.

Environmental sanitation

Environmental sanitation is still an urgent and many-sided problem in Africa. The question of water is probably the most serious : so long as Africans do not have adequate supplies of safe drinking water, the control of tropical diseases such as bilharziasis and amoebic dysentery will remain largely ineffective. But the problem is not a simple one, since Africa has rainy seasons lasting several months followed by months of total dryness. The construction of reservoirs is not often possible, for it would be too costly to be practical inasmuch as the population is scattered over such great distances. Another problem is to teach Africans to construct healthy homes and simple latrines. All this represents long-term, but essential, work.

A sanitary engineer went in January to the Seychelles, at the request of the Government. He is now in Angola, where he is working on an environmental sanitation programme with the authorities of the country. In November he will go to Pretoria, Union of South Africa, to attend a conference on housing in Africa.

Malaria control

Malaria control has priority in all of French Africa and in Liberia. In the latter country, a five-year plan for malaria control was prepared last December and will be carried out with aid from the technical assistance

[2] One of these diseases, kwashiorkor, has been the object of an FAO/WHO survey and report. See *Chron. World Hlth Org.* 1952, **6**, 61.

programme and UNICEF. An expert visited the Cameroons and French West Africa in July to put the finishing touches on a malaria-control programme, organized by the French authorities, which will have the collaboration of UNICEF. The first malaria training course was held in June and July at Lagos, Nigeria.[3] This course was addressed to English-speaking doctors, but it is intended to organize a similar one for French-speaking doctors next year, perhaps in the Cameroons.

Other health problems

Tuberculosis has had a tendency to become more prevalent in Africa during recent years. To avoid duplication of the work of metropolitan tuberculosis-control organizations, WHO maintains close contact with specialists sent by these organizations or by governments.

Yaws control has the same priority as malaria control in some countries. In Liberia, for example, yaws control is part of the same five-year programme mentioned under malaria control.

The WHO bilharziasis survey was continued throughout the year and will perhaps be followed by a conference on this disease. Although sleeping sickness is becoming increasingly rare in Africa, research on trypanosomiasis continues, and a meeting on this subject was to take place in September at Lorenzo Marques, Mozambique. A rabies-control programme will probably be undertaken in Kenya and in Northern and Southern Rhodesia.

A nurse who has worked in Africa as an instructor for many years has been appointed by WHO to undertake a survey in preparation for a conference on nursing, particularly on the training of nursing personnel.

A psychiatrist familiar with conditions in Africa is to study certain psychiatric and psychological problems in anticipation of a conference on the psychology of the African child which is being arranged in Brazzaville by the International Children's Centre and in which WHO will participate. In general, mental health in " darkest " Africa is less of a problem than it is in the more developed countries.

Professional education and training

Until now the Regional Office for Africa has approved fellowships for all candidates brought forward by governments. The training of doctors and other health personnel is of first consideration in raising the health standards of Africa. Fellowships for 1953-4 will aid in training personnel in nutrition, environmental sanitation, tuberculosis, maternal and child health, malaria, yaws, onchocerciasis, nursing, bilharziasis, rabies, etc.

[3] *Chron. World Hlth Org.* 1952, **6**, 280

The training of nurses and midwives is already part of the technical assistance programme, and it is understood that WHO will take part in this training. A health inspector has been in Liberia since February to train native sanitary inspectors.

Dr. Daubenton expressed the hope that many Africans will soon have acquired sufficient training to work in all the countries of their continent and to apply for posts in the Regional Organization. The recruitment of personnel for the Organization is difficult and constitutes a problem which must be solved, partially at least, before transfer of the Regional Office to Brazzaville.

Committee Decisions

The Regional Committee for Africa discussed and approved the programme and the budgetary provisions for the years 1953-4. It decided that priority projects, which will certainly be launched during these two years, even if the credits assigned to them are slightly reduced, should be the following :

— control of nutritional diseases in French Equatorial Africa, Belgian Congo, and Ruanda Urundi ; a nutrition survey in Northern Rhodesia and in the territories of Basutoland, Swaziland, and Bechuanaland ;

— environmental sanitation projects in Angola—already in preparation—in Kenya, and in the Seychelles (1954) ;

— malaria-control projects in all of French Africa and in Liberia, Gambia, the Gold Coast, and Nigeria ;

— tuberculosis survey followed by control measures in the territories of Basutoland, Swaziland, and Bechuanaland, and in Liberia, Mauritius, Nigeria, Nyasaland, Southern Rhodesia, and Sierra Leone ;

— yaws control in Liberia and Nigeria ; measures against whooping cough in Mauritius ; a survey of bilharziasis in Kenya and Liberia ; and a survey of yellow fever in Northern Rhodesia.

The committee decided to submit to the WHO Executive Board a proposal that Dr. Daubenton should continue as Regional Director for a year, until he reaches retirement age, following which he should be succeeded by Dr. F. J. C. Cambournac, chief of the Portuguese delegation.

The next meeting of the committee will take place at Kampala, Uganda, in September 1953. Future meetings will be held alternately in East Africa and in West Africa, though a meeting place in southern or central Africa might also be chosen, and invitations from governments will be considered.

Reports of Expert Groups

MODERN METHODS OF TRACHOMA CONTROL

The Third and Fourth World Health Assemblies, considering that trachoma and other related ophthalmias constituted an urgent health problem in many countries, requested the Expert Committee on Trachoma to recommend " effective preventive measures against these diseases "[1] and " to study the problem of trachoma with a view to submitting practical recommendations " as to " the possibility of successfully eradicating it by the application of modern methods of control ".[2] The results of studies undertaken during the past 18 months under the auspices of WHO and of the treatment of several thousands of patients have led to certain conclusions contained in the first report of the Expert Committee on Trachoma, which was published in September as No. 59 in the *World Health Organization : Technical Report Series*.[3]

Prophylaxis of Trachoma in International Traffic

The committee particularly stressed that trachoma, in the present state of knowledge, should be considered only slightly contagious. It also pointed out that a clear distinction should be made in sanitary legislation between measures applicable to travellers in transit and those applicable to immigrants. With regard to such measures, the committee made the recommendations which follow.

Travellers in transit

While persons suffering from chronic forms of trachoma—which are of low infectivity—need not be subjected to quarantine measures, this is not the case for persons suffering from the acute forms and wanting to undertake an international journey. The latter should undergo treatment which might make them non-contagious ; they might then be subjected to " surveillance " by the sanitary authorities of the country through which they are passing or in which they are staying temporarily. When deciding on whether the disease is at an infectious or non-infectious stage,

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[1] *Off. Rec. World Hlth Org.* **35**, 27

[2] *Off. Rec. World Hlth Org.* **28**, 23

[3] *World Hlth Org. techn. Rep. Ser.* 1952, **59**. Published in English and in French. Price : 1s 3d, $0.15 or Sw. fr. 0.60

the existence of complications and corneal or palpebral sequelae should not be considered but only the stage reached by the concomitant trachoma.

Migrants

Candidates for emigration should be examined in their countries of origin on two occasions separated by an interval of not less than two months. Any persons suspected of trachoma in the first of these examinations should be sent back to the competent ophthalmological service for examination and treatment, if necessary. When presenting themselves for the second examination, they might be provided either with a certificate to the effect that they are not suffering from trachoma, or with a certificate of cure. The committee considered that in certain circumstances a country of immigration could accept persons suffering from evolutive trachoma if effective treatment could be continued in that country.

Classification of Stages of Disease

Numerous difficulties are encountered in the interpretation of medical certificates by health and quarantine officials owing to the absence of any universally adopted classification of the various stages of trachoma and the existing uncertainty with regard to the degree of infectivity of trachoma in its various stages. It is because of these difficulties that the committee recommended that the MacCallan classification in its most simple form (Tr I, II, III, IV) should be universally adopted and that " in the present state of knowledge only stages I, II, and III of the disease (Tr I, Tr II, and Tr III) should be considered as more or less infectious ; stage IV (Tr IV) should be considered as non-infectious ".

A number of notation systems which have been proposed in recent years for scientific use afford indisputable advantages by adding to the above-mentioned classification a reflection of the clinical picture of the illness. The committee therefore proposed that some of these new features be embodied in the MacCallan classification, for the purpose of establishing a new classification to meet the needs of specialists and of scientific research. Details of this new system of notation are given in the committee's report.

Treatment

Basing its conclusions on several thousand patients treated, the committee was of the opinion that the majority of cases of trachoma can be cured by chemotherapy and antibiotic therapy. The most effective treatment is the simultaneous use of certain antibiotics with sulfonamides, the former administered locally and the latter, orally. However, in view of the toxic properties of some sulfonamides and the variation in tolerance from one

person to another, it is advisable to use the least toxic products—e.g., potassium and sodium salt of *p*-sulfonamido-phenyl-azosalicylic acid, sulfacetamide, polysulfonamide mixtures, dimethyl-sulfanilamido-isoxazole. Aureomycin and terramycin are the two antibiotics which have proved most effective.

The committee considered the following as the minimum therapy which can be carried out with every hope of obtaining a large percentage of cures :

" (*a*) Application of aureomycin or terramycin 1 % ointment four times daily without interruption for a period of two months.

(*b*) Evaluation of results and selection of resistant cases.

(*c*) For the resistant cases only, institution of the mixed treatment, local treatment being continued without interruption but with the addition of one of the above-mentioned sulfonamides given orally in a dose of 40-50 mg per kg of body-weight daily. This dose must be administered in at least two parts and must be adjusted with respect to the number of daily administrations : the larger the number, the smaller the dosage. The doses should be spaced out as regularly as possible over the 24 hours and should be continued for three consecutive weeks. The usual precautions should be taken to detect reactions among those under treatment.

(*d*) Depending on the change in the clinical picture, and in the absence of cure, a second and even a third course of sulfonamide treatment similar to the first should be given, with an interval of ten days between each course."

Control in Underdeveloped Countries

The report states that, although trachoma control calls for a large number of staff, its cost is relatively low since the price of the necessary drugs is moderate from the point of view of the community; and the expenditure is, to a large extent, compensated by the considerable economic value of the restoration to health of the workers. For example, in Tunisia alone, with a population of 3,500,000 inhabitants, about 25,000,000 working days per year are lost through trachoma and other eye diseases.

The committee considered that, in order to succeed, action against trachoma should include the following :

(1) appropriate legislation adapted to the social, economic, cultural, and administrative development of the country;

(2) health education of the people, which should be developed to the greatest possible extent by all available means and by modern propaganda techniques adapted to local conditions;

(3) organization of specialized control, consisting of a permanent network of fixed and mobile centres distributed over the whole of the territory in which trachoma is endemic. This network should be under the technical direction of a central organization—an institute of trachoma and eye diseases.

The committee recognized the effectiveness of large-scale projects for the control of trachoma and other infectious eye-diseases when their incidence is high and pointed out that the aim of such control projects is to reduce the sources of infection and the number of cases in the specified area. All sufferers from the disease, particularly infants and children, should be treated. It is known that children suffer from more active and infectious forms of trachoma than adults. If these forms can be eliminated, the incidence of the disease will be greatly diminished. In addition to the treatment of patients, campaigns against trachoma and other infectious eye-diseases should include organized fly-control.

Review of WHO Publications

FIRST INTERNATIONAL SYMPOSIUM ON CHEMICAL MICROBIOLOGY

Microbial Growth and Its Inhibition

Leading specialists from many parts of the world participated in a symposium, held in Rome, Italy, from 25 to 30 June 1951, on the subject of microbial growth and its inhibition, with particular reference to the antibiotics. This symposium, which was organized by the Istituto Superiore di Sanità, in collaboration with the Council for the Co-ordination of International Congresses of Medical Sciences and WHO, marked the inauguration of the International Research Centre for Chemical Microbiology. Eighteen of the papers presented on this occasion have been published as No. 10 in the *World Health Organization : Monograph Series*.[1]

Contributions range from an examination of the physiological principles underlying the antagonism between certain micro-organisms and antibiotic substances to a description of the new laboratory techniques of antibiotic production. The subjects discussed include : the structural relations of natural substances belonging to certain chemical groups; the contribution of microbial kinetics to a solution of the problem of the adaptation of micro-organisms to antibiotics and other drugs; the role of folic acid and of vitamin B_{12} in microbial metabolism and inhibition phenomena; the origin of the lag phase in the growth of certain bacteria; the induction and inhibition of the synthesis of adaptive enzymes; and the bacteriophage and lysogenic bacteria.

[1] *World Health Organization : Monograph Series*, No. 10, iv+286 pages, 67 figures, 38 tables; price : 15/—, $3.00, Fr. fr. 960.—, Sw. fr. 12.—. Mixed language edition containing articles in either English or French, with summaries in both languages.

Various possible explanations of the mechanism involved in the adaptation of micro-organisms to antibiotics are advanced in a number of articles, one of which deals particularly with the genetic aspects of the problem. One of the studies on fermentation techniques describes a " spargerless " fermenter. The chemistry of terramycin is dealt with in another article. Experiments are discussed which show the stimulating effects of antibiotics on the growth of swine and poultry—a factor already being exploited commercially. The antifungal properties of certain new antibiotics, and the interesting therapeutic possibilities opened up, are outlined. An international problem to which the discovery of new antibiotics has given fresh emphasis is summed up in a paper setting forth the requirements for the establishment of biological standards.

The papers were read by : C. N. Hinshelwood, L. Califano, D. D. Woods, J. Monod, S. S. Sokhey, E. B. Chain, M. J. Johnson, P. P. Regna, A. A. Miles, E. M. Weber, S. A. Waksman, M. Welsch, L. L. Cavalli, R. Robinson, B. C. J. G. Knight, A. Lwoff, L. Camici, and A. Tonolo.

A RAPID METHOD FOR THE SERODIAGNOSIS OF SYPHILIS

The WHO Venereal Disease Demonstration Team operating in India discovered a rapid method for carrying out serological tests. Previously the practice was to take blood samples during the day and to perform the serological tests later, during the evening; subjects giving a positive reaction were examined and treated the next day.[1]

Unfortunately, a great number of patients failed to return on the following day since the inhabitants of the region were not sufficiently educated to appreciate the importance of treating syphilis. With the assistance of the local authorities, the team endeavoured to round up those suffering from the disease, but in most villages they had to content themselves with examining and treating only 20% to 30% of the cases diagnosed as positive. The ideal procedure would have been to carry out the serological tests directly after taking the blood sample, quickly enough to enable the patients to await the results on the spot so that those giving positive reactions could be examined and treated immediately.

The most rapid test known is the slide modification of the Meinicke reaction. It requires only one drop of serum, and results can be read 25 minutes after obtaining the serum. To increase the rapidity with which the reaction could be determined, it was necessary to bring about clotting

[1] This does not refer to the Ghund experiment (see *Chron. World Hlth Org.* 1952, **6**, 266), in which penicillin injections were administered to all subjects immediately after the taking of the blood sample.

of the sample as quickly as possible. It had been shown in isolated cases that the necessary amount of serum could be centrifuged out after the sample had been kept in a water-bath at 37°C for 15 to 30 minutes. The team tried out this method on 15 February 1951 in the village of Junga. It was then found that the heat of the sun could serve the same purpose as the water-bath. Less than an hour after taking the sample, the results of the test could be given to the team physicians, who immediately examined and treated the positive cases.

All the samples taken during this first experiment were sent to the Simla laboratory and again subjected to the Meinicke test, as well as to the VDRL test (developed by the Venereal Disease Research Laboratory, Chamblee, Ga., USA). The results agreed so satisfactorily that the team applied the system in six other villages. When it was not possible to make use of the sun, a water-bath was improvised. It was found that, under the rather uncertain conditions of field installations, a team of three persons—a serologist, a technician, and a strong man to turn the centrifuge—could test 250 to 300 blood samples a day.

Not all positive reactors were, in fact, treated, for the simple reason that there were too many for the clinicians to handle. The team was working in areas where the incidence of syphilis was generally around 40%. It is obvious that, under such circumstances, there would have to be a larger number of clinicians in the team if the system were to be applied successfully. On the other hand, in an area where syphilis is less prevalent, the laboratory team would have to be increased to be able to diagnose a sufficient number of cases to keep even a small clinical team occupied.

Of 1,431 samples tested on the spot by this method, 605, or 42.3%, were found to be positive, and 826, or 57.7%, negative. The results of the Meinicke test carried out in the Simla laboratory agreed with those obtained by the rapid method in 98.5% of the cases. The discrepancies concerned almost exclusively cases giving very weak positive or doubtful-positive reactions. The VDRL tests gave a larger number of positive reactions than the Meinicke. As was to be expected in the light of previous work, the cases showing a Meinicke-negative and VDRL-positive reaction were usually cases which had already been treated for syphilis or cases giving a false-positive reaction.

The experiment was convincing : the rapid method, in which the blood-sample is warmed and the Meinicke slide-test used, is the most practical and the most effective method for underdeveloped areas in which syphilis is very prevalent.[2]

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[2] Summary of an article in *Bull. World Hlth Org.* 1952, **5**, 473. Kvittingen, J., McCullough, J. C., Tampi, R. B., & Bhalla, J. J., " Significance of rapid serological testing for syphilis in field surveys "

WORLD INCIDENCE OF DIPHTHERIA DURING RECENT YEARS

The *Epidemiological and Vital Statistics Report* for May 1952 included under the above title a study on the incidence of diphtheria since the second World War.[1] In 1947 an article was published on the incidence of this disease during the war and in the immediate post-war period;[2] at that time it was estimated that, during the war, the number of cases notified annually in Europe was more than 600,000. Since then, the situation has considerably improved. Europe continues to be the continent most affected by diphtheria, but in most countries there has been a continual decrease in the number of annual notifications. For Europe as a whole (or rather, for those European countries for which statistics are available), notifications dropped between 1947 and 1951 from 183,000 to 69,000.

The figures for Africa are hardly comparable with those for Europe. Notifications for 1950, which was the peak year, barely exceeded those in Austria alone. Diphtheria incidence has increased to some extent in Algeria, French Morocco, and Tripolitania, but the figures remain low. There has been a continuous upward trend in the Union of South Africa since 1947, and the 1950 and 1951 figures were higher than the maximum recorded during the twelve preceding years.

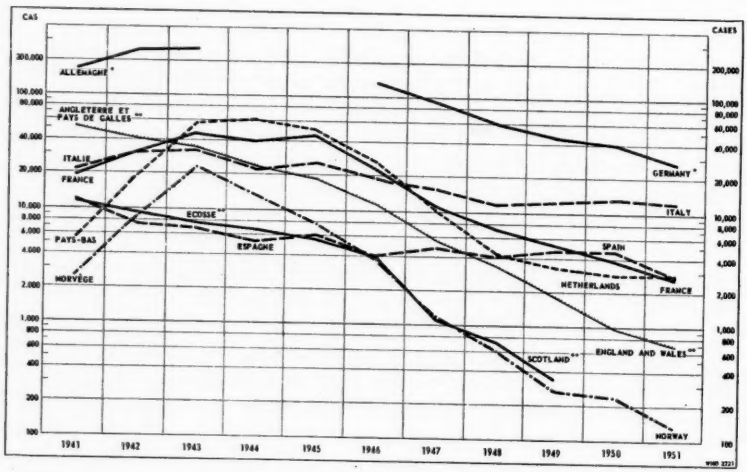
In America, the figures have remained much lower than in Europe. In 1945, the year of highest incidence, there were only 33,000 cases in all the American countries and territories; in 1950 this figure fell to 15,000. In Canada, notifications for 1951 represented only 8.5% of the pre-war median figure. In the USA, the total number of notifications fell, between 1947 and 1951, from 12,405 to 4,138; notifications for 1951 amounted to hardly 14% of the median pre-war figure. In Mexico also, the situation has improved : there were only 1,236 cases in 1950 as against 2,946 in 1942. On the other hand, incidence of diphtheria in certain small countries and territories is relatively high : in Costa Rica and Puerto Rico, 380 and 408 cases, respectively, were reported in 1950—almost as many as for the whole of Canada.

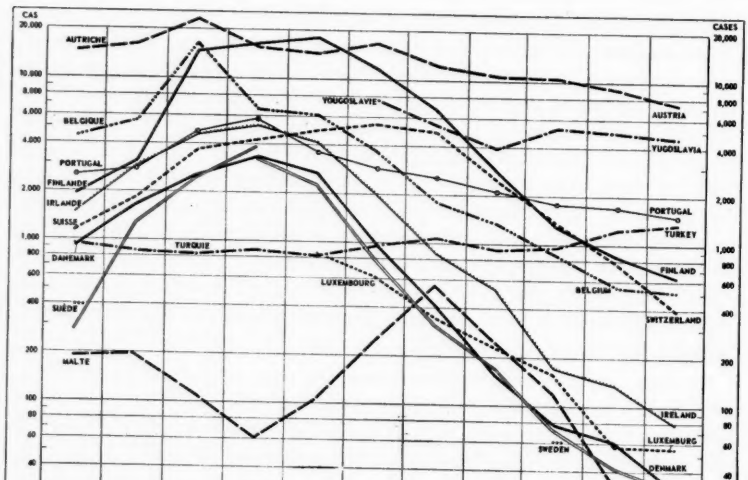
In Asia, so far as can be judged from the data available, the number of notifications has declined in Japan and has increased elsewhere. In Japan the figures were lower in 1947 than the median for the years 1935-9. From 1947 to 1951, the number of recorded cases fell from 28,342 to 10,743. On the other hand, the number of cases notified increased at Shanghai, Hongkong, Bangkok, and in Ceylon. Nevertheless, the number of notifications in these areas remains low; and the increase is due partly to the improvement

[1] *Epidem. vital Statist. Rep.* 1952, **5**, 223

[2] Stowman, K. (1947) *Epidem. vital Statist. Rep.* **1**, 60

FIG. 2. DIPHTHERIA CASES REPORTED IN VARIOUS EUROPEAN COUNTRIES 1941-51



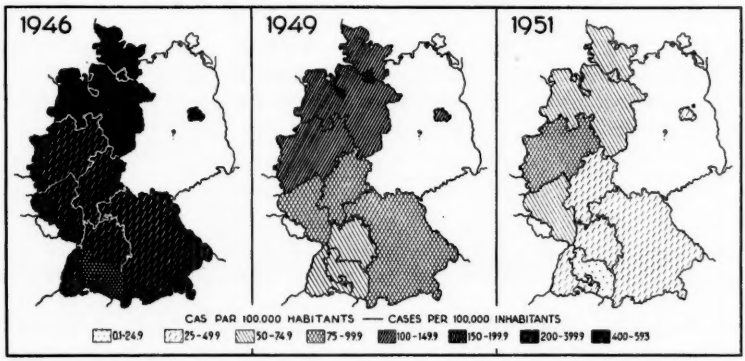


* Germany : 1937 territory up to 1943 ; Federal Republic of Germany since 1946
** Confirmed cases only (England and Wales : since 1944)
*** Clinical cases only since 1944

in registration since the end of the war. In Cyprus, Iran, Iraq, Israel, and the Republic of Lebanon, the number of notifications has, in most cases, increased.

In Europe, where diphtheria incidence is by far the highest, notifications in general have decreased, as has been stated (see fig. 2). Nevertheless, incidence remains very high in certain countries—particularly in Austria, Germany, Italy, and Poland. In 1949, almost as many cases were registered in these four countries together as in all the other countries of the world for which data were available. In the territory of the Federal Republic of Germany, however, there has been a 75% decrease in diphtheria incidence as compared with the pre-war median (see fig. 3). In certain regions, the

FIG. 3. DISTRIBUTION OF DIPHTHERIA IN GERMANY*



* Western sectors only

1951 figures are only 6.1% to 9.2% of those for 1946. Incidence remains high in Austria; and, although the 1951 figure of 7,414 cases, or 107 per 100,000 inhabitants, is the lowest since 1940, this still represents a rate approximately twice that of the Federal Republic of Germany. In Italy, the number of notifications has not varied very much over the country as a whole. The annual figures remain somewhere between 12,000 and 14,000, but the distribution in the various regions has changed. There has, for example, been a steady increase since 1948 in Latium. Poland, with 95 cases per 100,000 inhabitants, was still a highly endemic focus in 1950; and the number of cases increased between 1947 and 1950. In Hungary, the figures were still rising in 1949. In Yugoslavia, the drop in incidence has been less marked than in most other European countries (4,505 cases in 1951 as against 7,677 in 1946). The figures for Greece, Spain, and Turkey remain high. In the Netherlands, the number of annual notifications since 1940

has regularly exceeded the pre-war median (2,757 cases in 1951 as against 1,273). In Great Britain and Northern Ireland, on the contrary, the decrease in incidence, apparent since 1941, has continued. The number of cases recorded in 1951 represents hardly 4% of the 1940 notifications; in fact, diphtheria may soon cease to be a public-health problem. In the Republic of Ireland, the situation is also favourable : 79 cases in 1951, whereas the pre-war median was 2,584.

In Oceania, Australia has experienced a fall in diphtheria incidence since 1944, and the figures have been consistently lower than the pre-war median. In New Zealand, a maximum was reached in 1946 which was higher than the pre-war median, but incidence is distinctly lower than in Australia. For the period 1941-51, notifications in New Zealand amounted to one-seventh of those for Australia, although the population is only one-fourth of that in Australia.

In conclusion, diphtheria incidence in the world as a whole appears to be in regression. The increase which has been noted in certain non-European countries and territories is insignificant by comparison with the considerable improvement since the war in the majority of areas of high diphtheric endemicity.

WORLD INCIDENCE OF POLIOMYELITIS IN 1951

The March number of the *Epidemiological and Vital Statistics Report* [1] contains an important article by Dr. M. J. Freyche, Chief of the WHO Epidemiological Information Section, on the incidence of poliomyelitis in 1951. Included in this article are two short studies : " Omnipresence of the poliomyelitis viruses " and " Variation in incidence according to season and latitude ".

Poliomyelitis incidence decreased in a number of countries in 1951, particularly in those—such as the USA—in which it had been very high in recent years. On the other hand, there was a rise in incidence of the disease in some countries where it had previously been low.

In Africa, there was a considerable increase in the number of notifications in the Belgian Congo and the neighbouring territories of French Equatorial Africa and Angola. Seven hundred and forty-two cases were recorded during the first ten months of the year in Angola, whereas from 1927 to 1950 the annual notifications never exceeded 34.

In America, there was a 14% decrease in poliomyelitis incidence in the USA as compared with the rate for 1950. Incidence rose in Canada

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[1] *Epidem. vital Statist. Rep.* 1952, **5**, 145

and Mexico, however, the 1951 figures in the latter country being higher than at any time since 1937. Data are lacking for many South American and Central American countries.

The number of notifications in Asia showed no appreciable change except for Japan (1,000 more cases than during the previous year) and Israel, where the disease was less prevalent than in the year before but of a more serious nature. There are no data for several Asiatic countries.

The situation in western Europe was, on the whole, definitely better than in 1950. In the United Kingdom of Great Britain and Northern Ireland, notifications in 1951 numbered only one-third of those for 1950. In Italy, however, incidence was higher : 2,870 cases, a higher figure than for any of the fifteen preceding years, with the exception of 1939. Incidence was also higher in the Netherlands : 568 cases in 1951 as compared with a total of 308 for the three preceding years. In Switzerland, too, there was an increase over the 1950 figures, particularly in German Switzerland.

In Oceania, there was a marked rise in incidence of poliomyelitis during 1951. The number of cases in Australia exceeded that for the years 1938 and 1950, in which the incidence had been the highest since 1924. The most striking increase was noted in Queensland : 1,106 cases as against 119 in 1950.

* * *

From the studies which conclude Dr. Freyche's article, it would appear that poliomyelitis viruses are found, to a varying extent, among all peoples and in all climates. In countries where poliomyelitis is not a notifiable disease, some idea of its incidence may be obtained from mortality statistics. For example, it has been noted that in Japan, which was formerly considered free from large-scale epidemics, the death-rate from poliomyelitis between 1923 and 1943 was 7.6 per 100,000 inhabitants—a figure approaching that for the USA (8.9). In another country which was thought to be exempt from poliomyelitis—Brazil—the orthopaedic hospitals revealed the presence of the disease, which is responsible for a large proportion of the cases of paralysis among children.

It would seem that poliomyelitis epidemics are frequent in hot climates and that they are as severe there as in cold or temperate regions. However, in hot countries the phenomenon of seasonal variation observed in temperate climates is absent, and outbreaks may occur at any time of the year.

PREVALENCE OF LEPROSY IN THE WORLD

The Fifth World Health Assembly raised the problem of leprosy and decided that WHO should encourage active programmes in leprosy control.[1] Such programmes might now be effective since treatment with sulfones results in clinical improvement of the patient and reduction in the contagiousness of the disease. In considering the control of leprosy, however, one of the first questions which naturally arises is : how many people suffering from leprosy are there in the world ? A study in the June number of the *Epidemiological and Vital Statistics Report*[2] by Dr. M. Pizzi, Chief of the WHO Section of Morbidity Statistics, gives most of the basic information at present available on the prevalence of leprosy.

Even though leprosy has almost everywhere lost the " epidemic and invading characteristics " which it had in the Middle Ages, it is still prevalent in many parts of the world : estimates of the total number of cases vary from two million to seven million. This wide range is partially explained by the fact that the first symptoms of the disease are difficult to detect. It is impossible to ascertain the exact number of cases of leprosy in the world today. For many countries the only accurate figure is that of the number of patients in leprosaria. But, in Indonesia, for example, the total number of people with leprosy is estimated at 75,000, whereas there are only 3,735 in leprosaria (1950); and, in French Equatorial Africa, the estimated number of cases is about 50,000, but in 1951 only 1,000 were under treatment. It can readily be seen that it is difficult to get an idea of the actual number of cases of leprosy in a country from the number of patients hospitalized or under treatment. In other countries, the health services record the cases of leprosy of which they receive notification, whether or not they are hospitalized, but they know that their figures represent only a small proportion of the total number. In Paraguay, for instance, 979 cases were registered in 1949 ; but the total number in the country is estimated to be somewhere between 5,000 and 10,000. In some of the African territories under British administration, random surveys have been made, morbidity-rates have been calculated on the basis of the number of cases found, and an estimate of the total for the whole country has been drawn from these rates.

Not only the total number of cases of leprosy but also the proportion of them which are infectious and which contribute to the spread of the disease is of interest to public-health services. It is known that neural, or tuberculoid, leprosy, in which the skin lesions are frequently bacterio-

[1] *Chron. World Hlth. Org.* 1952, **6**, 175. The first session of the recently created Expert Committee on Leprosy met 22 September.

[2] *Epidem. vital Statist. Rep.* **5**, 263

logically negative, is a benign form, while the lepromatous type, in which the skin lesions are usually bacteriologically positive, is more infectious. Official reports and technical papers on the incidence of leprosy often fail to indicate the type concerned—lepromatous or neural. However, some countries have given this information : in Africa (except for the Union of South Africa) the proportion of lepromatous cases is about 20%, while in America the proportion ranges from 40% in Paraguay to 90% in Colombia and is about 50% in most places. If a valid comparison between the data for these two continents could be made, this difference might suggest that the infection is older in Africa than in America, since the lower proportion of lepromatous cases might indicate a higher degree of immunity.

Africa

Leprosy is widespread in the central and western regions of Africa; North Africa is relatively free from the disease. The total number of cases is somewhere between two millions and two millions and a half. Among the territories which, according to rough estimates, seem to have the most cases of leprosy are : Nigeria (about 400,000 in 1948); French West Africa (200,000); Belgian Congo (100,000); French Equatorial Africa (50,000); Madagascar (40,000); Ethiopia (15,000-20,000); and the Portuguese colonies in west Africa—Angola, Cape Verde Islands, Portuguese Guinea, Sao Tomé, and Principe (total, 20,000). Leprosy is not uncommon in certain other territories, under British administration; random surveys have made possible the following estimates of the number of cases : 100,000 in Tanganyika (prevalence-rate of 18.1 per 1,000); 80,000 in Uganda (17.9 per 1,000); 20,000 in Northern Rhodesia (12.6 per 1,000); and 35,000 in Kenya (10.3 per 1,000).

America

Leprosy does not constitute a public-health problem in North America. In 1950, there were 390 cases isolated and treated in the USA; in 1949, there were 8 cases hospitalized in Canada. In certain countries of Central and South America, however, the disease is rather prevalent, but less so than in Africa or Asia. Of the countries in America, Brazil has the highest number of cases of leprosy : 37,541 registered in 1948. Argentina is estimated to have about 12,000 (1945); Mexico, more than 9,000 (1950); and Paraguay, between 5,000 and 10,000. In 1946 there were 8,412 known cases in Colombia, with the lepromatous type of infection predominant. In Peru there are about 3,500 leprosy patients, of whom 3,000 are in the north-eastern part of the country, a zone of endemicity. Cuba in 1946 had 2,802 registered cases; Venezuela, in 1947, 2,795; and French Guiana, in 1946, 1,131, a prevalence-rate of about 4%. In French Guiana it has

been found that children under 15 years of age represent about half of the new cases; an effort is being made to detect early cases of leprosy, especially among schoolchildren. In British Guiana, there were 1,172 known cases in 1948, or about 2.5 per 1,000 inhabitants. In Chile, leprosy is practically unknown.

Asia

Asia is the principal focus of leprosy; it is widespread in almost every country on the continent. In India alone there are more than a million cases. In western Asia and Siberia, however, the disease is more rare.

In India the zone of high endemicity extends along the whole of the east coast and in the south; it encompasses West Bengal, South Bihar, Orissa, Madras, and Travancore-Cochin. In the highly endemic areas, leprosy may be prevalent in from 2% to 5% of the population; but, in certain regions, the rate rises to 10% and, in certain villages, even to as high as 15% to 20%. On the other hand, in north-western India the prevalence-rate is scarcely 0.01%. Infectious patients throughout India may number about 250,000.

In China there are an estimated million cases, but data are lacking for even a rough approximation. The number of patients under treatment in certain leprosaria and dispensaries in 1948-9 was well under 10,000.

In Indonesia there were an estimated 75,000 cases in 1950. In Thailand, estimates vary between 20,000 and over 60,000. The estimate for Japan is 20,000; for South Korea, also 20,000; and for the Philippines, 18,500.

Europe

There are still some endemic foci in Europe, mainly along the Mediterranean, particularly in Spain. Leprosy is also somewhat prevalent in Portugal.

In 1949 Spain still had approximately 2,000 beds available for leprosy patients. The estimated total number of cases is between 4,000 and 8,000. The principal foci are in the south : a census taken in 1949 revealed 1,708 cases, of which 576 were in Andalusia and Badajoz. Galicia and the eastern Mediterranean coast are also endemic zones.

Portugal has a modern leprosarium of 1,000 beds, and a census carried out between 1934 and 1937 disclosed 1,416 cases.

In Greece, the total number of patients is estimated at 2,000; the prevalence seems to be particularly high in Crete. In France, there are 200-300 leprosy patients under treatment, but almost all of them contracted the disease in the colonies. About one hundred cases are known in the United Kingdom of Great Britain and Northern Ireland. At the end of 1948, Norway had 16 cases and Sweden, 6. The Federal Republic of Germany had 4 known cases in 1949.

Oceania

The number of cases of leprosy in Australia is few : 132 isolated patients in Queensland at the end of the fiscal year 1948-9. New Zealand seems to be free from the disease. On the other hand, leprosy is endemic in many of the islands— Fiji, Solomons, and the Hawaiian archipelago. The leprosy hospital in Makogai, in the Fiji Islands, which also admits lepers from neighbouring islands, had 669 cases in October 1948. The British Solomon Islands had 950 patients in 1947; in Hawaii there were 475 registered cases at the end of 1950; and in French Oceania there were 387 known cases in 1945. In the Pacific Islands under USA administration, the total number of patients among the 50,000 natives is estimated to be between 500 and 1,000.

In brief, the health services of 85 countries or territories know of a little more than half a million cases of leprosy, a figure representing probably no more than one-quarter of the total number according to most conservative estimates, and about 7% of the total according to the highest estimate. It can be seen that this approximation is not sufficient to permit an exact evaluation of the prevalence of leprosy in the world, and the author emphasizes the need for more precise and complete statistical information on this subject.

Reports from WHO Fellows

Many of the letters and reports received from WHO Fellows are of such interest that they deserve to be read by a wider public. They demonstrate more vividly than a series of facts and figures both the character of the fellowship programme and the response of the Fellows themselves. Selections from these reports are therefore published from time to time, but it must be emphasized that the opinions expressed are those of the Fellows.

Child Psychiatry in the USA

A study-tour undertaken through a WHO/UNICEF fellowship enabled Dr. Henry Aubin, Chief Medical Officer of the Child Medico-Psychological Centre at Clermont-Ferrand, France, to visit a great number of psychiatric establishments in the USA and to study their methods of work. The observations of Dr. Aubin on some of the achievements which particularly impressed him during his tour are briefly summarized hereunder.

Child guidance clinics

In the USA there are two types of psychiatric institute for children : " child guidance clinics ", which are essentially for the prevention and treatment of mental disorders and of numerous psychosomatic conditions, and a certain number of treatment and re-education establishments.

" Child guidance clinic " means, briefly, a centre for the observation and psychotherapy of outpatients—a kind of enlarged dispensary particularly concerned with emotional and social problems.

The principal element in such centres—which are in most cases set up in ordinary houses—consists of a playroom furnished with a great variety of material and, in general, with some arrangement whereby the " play therapist " can observe without being seen. Treatment usually includes sessions of individual therapy using every possible medium of self-expression, particularly drawing, including " finger painting ".

The number of staff in these child guidance clinics is ten times, sometimes even more, that usually found in French establishments. It includes a group of psychiatrists, at the head of whom is a recognized specialist with training in psychoanalysis and related subjects, psychologists, specialist schoolteachers, and, in particular, that category of worker which originated in the Anglo-Saxon countries : the social worker. The latter function both as social workers proper and as advisers qualified to modify the child's environment, to discover and tactfully point out educational errors, and to give moral and material assistance to the families. For this purpose they often have considerable funds at their disposal. The administrative staff, also numerous, is equipped with all the most modern devices (means for recording of interviews, general use of dictaphones, etc.) and makes every effort to present clearly both the details and the general picture of observation and treatment.

Children's villages

During his tour, Dr. Aubin visited a number of re-education and treatment centres such as the Child Study Center (Baltimore), which deals particularly with scholastic adjustment cases; the Emma Pendleton Bradley Home (Providence), for children suffering from behaviour disorders, neuroses, psychoses, and epilepsy ; and the Governor Bacon Health Center (Delaware), which cares, among others, for crippled children, children suffering from emotional disorders, backward epileptics, etc.

One of the most remarkable of these institutions is the Dobbs Ferry Children's Village for the re-education of pre-delinquents and of young delinquents considered as reclaimable. Since its foundation a century ago the village has re-educated 50,000 children, with remarkable results.

The basic principle is to distribute the children in such a manner as to avoid humiliating comparisons among them. Thus, each house has children of the same age; each class, children of the same level; each workshop, children of the same manual ability. Team spirit is substituted for the competitive spirit and the common task for individual work. Children are encouraged to frequent libraries, and an effort is made in specialized clubs, selected according to individual inclination, to develop a taste for the arts (music, dramatic art, painting, pottery, etc.), the sciences, collections (stamps, for example) and so on. The children produce a journal and elect a government with a mayor and delegates who contribute to the administration, justice, hygiene, and amusements of the village. One very interesting feature is that the village has a monetary system which plays an important role in the life of the children. Through it they learn how to plan a well-balanced personal budget; it also acts as an effective incentive.

Parents are encouraged to visit their children and to participate in the task of re-education; many of them draw considerable moral benefit from these contacts, to the advantage of their other children.

Education of the public

After indicating the direction of the scientific research which is being undertaken in many centres, Dr. Aubin stresses the immense effort made in the USA during the past ten years to inculcate in parents the basic principles of mental health in children. The appeal is to fathers as well as to mothers. It opposes the inopportune exercise of authority and the implanting of a sense of inferiority in the child, defines the laws of growth and their educative corollaries, and explains the origins of neurotic behaviour and psychosomatic disorders.

The press, radio, and books play a leading part in this effort to obtain the co-operation of the public, which is made all the easier by the policy of the government on problems of childhood. A children's charter, in which the rights of American children are defined, forms the basis of the activities of the Children's Bureau, which controls and co-ordinates all work affecting the various aspects of the life of the child. Finally, mention must be made of the important contribution of the social workers in their influence on families, without which no progress in child psychiatry could be made.

Notes and News

Regional Seminar on Vital and Health Statistics for the Western Pacific

A regional seminar and teaching course in vital and health statistics for the Western Pacific was held in Tokyo from 4 August to 20 September 1952. About thirty participants from various countries attended the meetings : 14 from Japan; 10 WHO Fellows from Australia, China, the Philippines, and the Republic of Korea; and 3 United Nations Fellows from Cambodia, China, and Hongkong.

The object of this seminar was not only to train personnel in techniques of vital and health statistics, but also to familiarize the participants with the aims and working programmes of international organizations and to disseminate information about international standards and methods for improving national statistics and international comparability of such statistics. It was also hoped to develop close working relationships among national agencies concerned with recording vital statistics and public-health and statistical services, and to exchange ideas on the adaptation and modification of national systems.

Following the opening ceremony, at which the Minister of Health and Welfare of Japan gave an address, there were a number of sessions on the following subjects : statistical methodology (14), vital statistics (17), health statistics (17), and the international classification of diseases, injuries, and causes of death (6). Two lectures on the structure and functions of the United Nations and WHO were also given. Arrangements were made for visits to statistical offices in Tokyo and for exhibitions and demonstrations of punch-card systems and mechanical sorting devices, in order to familiarize the participants with modern equipment for statistical work.

All the participants displayed a keen interest in the courses offered them. This seminar —the first in the Region—marks an important step in international health work, since detailed, accurate, and comparable vital and health statistics are indispensable in evaluating the extent and urgency of health problems and the results of international action with regard to them.

Maternal and Child Health Demonstration Project in Formosa

With the assistance of UNICEF and WHO, the Government of Formosa has undertaken a maternal and child health demonstration project. A demonstration area in a central region of the island has been selected, and WHO team members have begun their assignments. The project is expected to last two years, after which further operations will be carried on by the national health authorities.

Leprosy Specialist on Assignment in Burma

As a result of a survey carried out in Burma in 1951 by Dr. Dhamendra, WHO leprosy consultant, the Organization, at the request of the Government, has sent to Rangoon Dr. P. H. J. Lampe, a specialist who has had almost thirty years' experience in leprosy control and other public-health problems and who was instrumental in the establishment of the Central Institute of Leprosy Research in Djakarta, Indonesia. Dr. Lampe will advise the Government of Burma on preparations for a campaign against leprosy and integration of this campaign into the general programme of public health. He will participate in the training of personnel in the latest advances in leprosy and will aid in developing training facilities at the Central Leprosy Clinic in Rangoon. WHO will

provide drugs and equipment for this project to a value of $3,000 and will grant two fellowships to allow Burmese leprosy workers to study abroad.

Aid to Indian Medical College

The Government of India asked WHO to help to develop the newly-established Medical College at Trivandrum (State of Travancore-Cochin)—one of the most modern and well equipped institutions of its kind in India—by providing a Principal for the College for the first two years. After consultation between the Government of India and WHO, Dr. Axel Höjer was appointed. Dr. Höjer, who recently retired from the post of Director-General of Public Health of Sweden, is a former associate professor of hygiene and public health, and a member of the committee on reform of medical education in Sweden. He was active also in the field of international health and served for three years as a member of the WHO Executive Board. Social medicine, public health, and nutrition were among his main activities. In addition to being Principal of the Medical College, he will lecture on social and preventive medicine and on public health.

DDT Factory in India

According to the terms of an agreement signed in July by the Government of India, the United Nations International Children's Emergency Fund (UNICEF), and WHO, a DDT factory is to be constructed in Delhi. By March 1954 this factory will be able to produce annually 700 tons of insecticides, for use in malaria-control activities in India. In addition, the plant will serve as a training centre in modern methods of insecticide production for technicians from other countries.

The Indian Government will provide the land, buildings, transport within the country, water, and electricity; it will also pay for the installation of equipment, services of local personnel, and general expenses. UNICEF will procure the essential equipment for the production of DDT and for a control laboratory. WHO will furnish the services of four international experts who will advise on the construction and initial operation of the plant. WHO will also arrange for the training of Indian personnel in DDT-production methods.

Occupational Health Survey in Egypt

An occupational health survey will be conducted in Egypt, in collaboration with the Ministry of Public Health and the Department of Labour of the Ministry of Social Affairs, by a consultant appointed by WHO and serving also in the capacity of consultant for the International Labour Organisation (ILO). This consultant is Dr. A. Bruusgaard, Chief Medical Inspector of Factories for Norway, who is on leave of absence for three months. Dr. Bruusgaard has travelled in America and England (with a grant from the Rockefeller Foundation) to study occupational health problems and has participated in several ILO conferences, including an expert conference on pneumoconiosis.

After completing his survey in Egypt, Dr. Bruusgaard will prepare a report with recommendations to the Egyptian Government and to WHO, which will be of value in developing a long-term programme of occupational health service based on the needs of the country.

New Tuberculosis Centre in Egypt

Dr. J. B. McDougall, who was chief of the WHO Tuberculosis Section in Geneva for five and a half years, has returned to the " field " in Egypt, where he worked for some months in 1944-5. He is assisting the Egyptian Government in the establishment of a tuberculosis demonstration, teaching, and control centre in Cairo and is working with

Egyptian tuberculosis specialists and a small international staff. It is hoped that, with the co-operation of all the tuberculosis services in the Cairo area, the project may become a regional centre for training in tuberculosis control of students from all the Arab-speaking countries of the Eastern Mediterranean.

WHO Seals

1952 is the first year in which WHO seals have been made available to Member States. Eleven governments have already asked for and received them for sale in their respective countries. It is still too soon to know the results of these sales. Three-fourths of the amount received will remain in the countries for promotion of national health activities, and one-fourth will be sent to WHO to be placed in the revolving fund established by the Fourth World Health Assembly. WHO seals for 1953 will be sent to governments upon request. The proposed date for launching the second sales campaign is 7 April 1953, World Health Day.

CORRIGENDA

1952, Vol. 6, No. 6 (June) p. 140

The caption of the photograph should read : Mr. K. H. Schulz, Public-Health Sanitarian of the team, demonstrates the formulation of an insecticide preparation to local workers at Hoi-Keaw

1952, Vol. 6, No. 7-8 (August) p. 249

Add Professor J. Maisin *under* Council for the Co-ordination of International Congresses of Medical Sciences

1952, Vol. 6, No. 9 (September) p. 280, line 14

The names of the experts should read : Sir Gordon Covell, Dr. P. C. C. Garnham, Mr. M. H. Holstein, Professor G. Raffaele, and Dr. P. F. Russell.